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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/595,992	05/24/2006	Giuseppe Gugliotta	72NP154551	1487
53082	7590	08/05/2009		
General Electric Company GE Global Patent Operation PO Box 861 2 Corporate Drive, Suite 648 Shelton, CT 06484			EXAMINER NGUYEN, ANDREW H	
			ART UNIT 3741	PAPER NUMBER
			NOTIFICATION DATE 08/05/2009	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gpo.mail@ge.com  
allyson.camaroli@ge.com

# Office Action Summary

**Application No.**

10/595,992

**Applicant(s)**

GUGLIOTTA ET AL.

**Examiner**

ANDREW NGUYEN

**Art Unit**

3741

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/CI/CD)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date 6/6/06

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 7 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. "Each gas generator group" lacks antecedent basis. Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,158,207 to Polenick et al (Polenick) in view of US 7,114,351 to Jones (Jones).

Regarding claim 1:

Polenick teaches a procedure for maintaining a group of gas turbines. Polenick creates a succession of gas turbines to be subjected to maintenance such that a first turbine is chosen for maintenance, followed by a second, and so on until all of the engines have been serviced (col 2 lines 46-56). Polenick fails to teach substituting an auxiliary gas turbine for the engine that is being overhauled. However, it was well

known in the art, as taught by Jones, to maintain a gas turbine on standby in order to replace a turbine that is down (col 6 lines 26-30; col 5 lines 12-24; col 4 lines 29-34). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a standby turbine in order to replace a turbine that requires maintenance and ensure continuous operation, as taught by Jones.

Regarding claim 2:

Polenick teaches stopping only one engine at a time to overhaul (col 2 lines 48-56).

Regarding claim 3:

Both Polenick and Jones teach the need to minimize downtime for gas turbines (col 2 lines 48-56 in Polenick and col 4 lines 53-58 in Jones). Polenick teaches returning the turbine to operation as soon as the overhaul is completed. Jones teaches ensuring continuous operation. It would have been obvious to one of ordinary skill in the art at the time of the invention to stop the turbine for the minimum amount of time necessary for effecting substitution in order to ensure continuous operation, as taught by Polenick and Jones.

Regarding claim 4:

Polenick teaches providing a continuously rotating order of maintenance (col 2 lines 48-56). Polenick does not teach substituting the first turbine with the second so that the second is under maintenance. However, it was well known in the art to substitute one gas turbine for another that requires maintenance, as taught by Jones.

The order of substitution and replacement is a matter of obvious design choice in view of this.

Regarding claim 5:

Polenick teaches that his method may be used with any group of multiple engines, regardless of the number of engines (col 2 lines 35-38). Choosing to have four production trains would have been a matter of obvious design choice in view of this teaching.

Regarding claim 6:

Polenick teaches that his method can be used regardless of the number of engines. Two turbines in Polenick can be defined as a production train (i.e. turbines 1 and 2 can be defined as a production train). Jones teaches that the gas turbines may be used to liquefy gas (abstract). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the turbines of Polenick to liquefy gas, as taught by Jones.

Regarding claim 7:

Polenick teaches each turbine being a separate turbine with its own gas generator. Thus, the number of gas generators is equal to the number of gas turbines.

Regarding claim 8:

Polenick teaches the turbines being used in a "plant" (col 1 line 33). Jones teaches using the turbines in a liquefaction plant (col 2 line 41). These are industrial applications and qualifies the turbines as being "heavy duty".

Regarding claim 9:

Polenick teaches a gas turbine with a gas generator (Fig 1). Each gas turbine has a power turbine and a discharge outlet is inherent.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANDREW NGUYEN whose telephone number is (571)270-5063. The examiner can normally be reached on 8 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Cuff can be reached on (571)-272-6778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/AN/

/Michael Cuff/  
Supervisory Patent Examiner, Art Unit 3741